

Form PTO 1449
(Modified)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY DOCKET NO.
211827US0CONTSERIAL NO.
09/923,353

LIST OF REFERENCES CITED BY APPLICANT

APPLICANT

Philippe BOIRE et al.

FILING DATE

August 8, 2001

GROUP

1775

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
ATP	AA	4,112,142	09-05-78	Schroder et al.			
	AB	5,028,568	07-02-91	Anderson et al.			
	AC	5,304,394	04-19-94	Sauvinet et al.			
	AD	5,342,676	08-30-94	Zagdoun			
	AE	5,348,805	09-20-94	Zagdoun et al.			
	AF	5,514,454	05-07-96	Boire et al.			
	AG	5,618,579	04-08-97	Boire et al.			
	AH	5,584,169	12-29-98	Heller et al.			
	AI	5,389,427	02-14-95	Berquier			
	AJ	5,368,892	11-29-94	Berquier			
	AK	6,326,079	12-04-01	Philippe et al.			
	AL	6,103,363	08-15-00	Boire et al.			
ATP	AM	5,616,532	04-01-97	Heller et al.			
	AN	4,238,276	12-09-80	Kinugawa et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO	
ATP	AO	JP 63-100042	05-02-88	Japan w/English Abstract Attached and First and Second English Translations	X	
	AP	EP 0 544 577	06-02-93	EP w/English Abstract		X
	AQ	WO 98/06675	02-19-98	WIPO		
	AR	WO 00/75087	12-14-00	WIPO		
	AS	WO 97/07069	02-27-97	WIPO		
	AT	WO 97/10186	03-02-97	WIPO		
	AU	JP 7-117600	04-06-95	Certified English Translation w/ Executed Declaration	X	
ATP	AV	JP 7-99425	03-20-95	Certified English Translation w/ Executed Declaration	X	

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

ATP	AW	Masanari Takahashi et al., "Pt-TiO ₂ Thin Films on Glass Substrates as Efficient Photocatalysts," <i>Journal of Materials Science</i> , 24 (1989) pages 243-246.
	AX	S. Fukayama et al., "Highly Transparent and Photoactive TiO ₂ Thin Film Coated on Glass Substrate, Abstract No. 735, pages 1102-1103, 187 th Electrochemical Society Meeting, Reno, NV, May 21-26, 1995, and attached facsimile transmission from The British Library indicating that the date of availability for public use was March 29, 1995.
	AY	D.R. Uhlmann, "Glass: Science and Technology," Volume 2, Processing I, pages 253-283, 1984.
ATP	AZ	GlassFAQs, <i>GlassFACTS.com</i> , pg 1-5.

Examiner

g-jp

Date Considered 11/25/02

*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 211827US0CONT		SERIAL NO. 09/923,353		
LIST OF REFERENCES CITED BY APPLICANT				APPLICANT Philippe BOIRE et al.				
				FILING DATE August 8, 2001		GROUP 1775		
U.S. PATENT DOCUMENTS								
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE		
OIP SEP 25 2002 PATENT & TRADEMARK OFFICE	AA	6,090,489	07-18-00	Hayakawa et al.				
	AB	6,037,289	03-14-00	Chopin et al.				
	AC	6,013,372	01-11-00	Hayakawa et al.				
	AD	6,103,360	08-15-00	Caldwell et al.				
	AE	6,210,779	04-03-01	Watanabe et al.				
	AF	6,027,797	02-22-00	Watanabe et al.				
	AG	5,853,866	12-29-98	Watanabe et al.				
	AH	6,054,227	04-25-00	Greenberg et al.				
	AI	6,027,766	02-22-00	Greenberg et al.				
	AJ	6,238,738	05-29-01	McCurdy				
	AK	4,017,661	04-12-77	Gillery				
	AL	5,035,784	06-30-91	Anderson et al.				
	AM	5,547,823	08-20-96	Murasawa et al.				
	ATP	AN	3,630,796	12/28/71	Yokozawa et al.			
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		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO			
ATP ↓	AO	JP 7-182019	06-14-95	Certified English Translation w/ Executed Declaration	X			
	AP	JP 7-205019	07-08-95	Certified English Translation w/ Executed Declaration	X			
	AQ	JP 7-182020	06-14-95	Certified English Translation w/ Executed Declaration	X			
	AR	EP 0 581 216	02-02-94	Europe				
	AS	JP 5-302173	11-16-93	Japan (English Translation)	X			
	AT	JP 5-3149281	12-26-78	Japan (English Abstract Only)				
	ATP	AU	JP 8-164334	06-25-96	Japan (w/English Abstract)	X		
	AV							
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)								
ATP	AW	JP 88-158890, Abstract Only, Derwent, JP 860243762, "Glass Article Difficult Soil Coating Thin Titanium Dioxide Coating Contain Platinum@ Rhodium Palladium@.						
↓	AX	Chemical Abstracts., 116: 89812a, Sokolov, et al., "Selective Activation of Smooth Surfaces of Glass and Ceramic Articles Before Chemical Metalization," Abstract Only.						
	AY	International Search Report for PCT/FR96/01421.						
ATP	AZ	International Preliminary Examination Report for PCT/FR96/01421.						
Examiner <i>g79</i>				Date Considered <i>11/25/02</i>				
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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,892,712	01-09-90	Robertson et al.			
	AB	4,544,470	10-01-85	Hetrick			
	AC	4,485,146	11-27-84	Mizuhashi et al.			
	AD	5,032,241	07-16-91	Robertson et al.			
	AE	6,106,955	08-22-00	Ogawa et al.			
	AF	5,869,187	02-09-99	Nakamura et al.			
	AG	6,387,844	05-14-02	Fujishima et al.			
	AH	5,751,484	05-12-98	Goodman et al.			
	AI	5,735,922	04-07-98	Woodward et al.			
	AJ	5,308,805	05-03-94	Baker et al.			
	AK	5,478,783	12-26-95	Higby et al.			
	AL	4,888,038	12-19-89	Herrington et al.			
✓	AM	5,698,262	12-16-97	Soubeyrand et al.			
ATP	AN	5,525,406	06-11-96	Goodman et al.			

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ATP	AO	JP 8-313705	11-29-96	Japan (w/English Abstract)		X
	AP	JP 9-173783	07-08-97	Japan (w/English Abstract)		X
	AQ	JP 9-227157	09-02-97	Japan (w/English Abstract)		X
	AR	JP 9-227158	09-02-97	Japan (w/English Abstract)		X
	AS	JP 9-235140	09-09-97	Japan (w/English Abstract)		X
	AT	JP 8-119673	05-14-96	Japan (w/English Abstract)		X
✓	AU	JP 9-241037	02-09-99	Japan (w/English Abstract) (corresponds to U.S. Patent No. 5,869,187)		X
ATP	AV	WO 96/13327	05-09-96	WIPO (corresponds to U.S. Patent No. 6,387,844)		X

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

ATP	AW	Robert J. Good et al., The Modern Theory of Contact Angles and the Hydrogen Bond Components of Surface Energies, in Modern Approaches to Wettability, Theory and Applications, pp 1-3, Schrader et al., Eds.
	AX	H.H. Dunker, Glass Surfaces, Treatise on Materials Science and Technology, Vol. 22, pp. 1-75, 1982.
↓	AY	Toshiya Watanabe et al., Photocatalytic Activity of TiO ₂ Thin Film under Room Light, in Photocatalytic Purification and Treatment of Water and Air, pp. 747-751, 1993, Ollis et al., Eds.
ATP	AZ	The Japan Times, May 21, 2002, Tuesday, Race for Technology, pp. 2-5, from LexisNexis.

Examiner

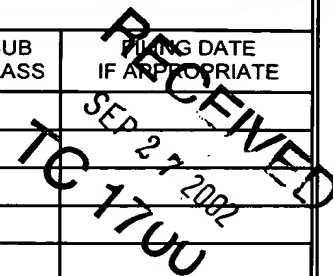
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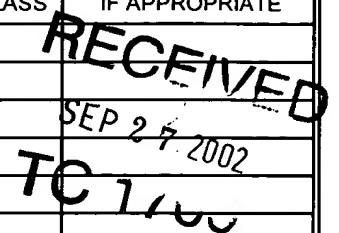
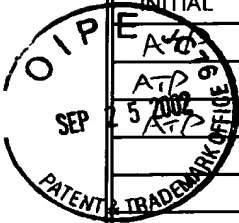
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U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE	
AA	5,745,291	04-28-98	Jenkinson				
AB	5,773,086	06-30-98	McCurdy et al.				
AC	6,001,462	12-14-99	Purvis et al.				
AD	5,580,364	12-03-96	Goodman et al.				
AE	5,755,845	05-26-98	Woodward et al.				
AF	5,505,989	04-09-96	Jenkinson				
AG	5,749,931	05-12-98	Goodman et al.				
AH	6,238,738	05-29-01	McCurdy				
AI	5,869,187	02-09-99	Nakamura et al.				
AJ	6,068,914	05-30-00	Boire et al.				
AK	5,939,201	08-17-99	Boire et al.				
AL	6,322,881	11-27-01	Boire et al.				
AM	6,045,896	04-04-00	Boire et al.				
AN	5,961,843	10-05-99	Hayakawa et al.				
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	DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO			
AO	GB 2 355 273	04-18-01	Great Britain				
AP	GB 2 320 499	06-24-98	Great Britain				
AQ	WO 01/72652	10-04-01	WIPO				
AR	GB 2 320503	06-24-98	Great Britain				
AS	GB 2 324098	10-14-98	Great Britain				
AT	WO 98/06510	02-19-98	WIPO				
AU	WO 01/10790	02-15-01	WIPO				
AV	WO 00/75087	12-14-00	WIPO				
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AW	P. Chartier, Verre, Glass Institute, Volume 3, No. 3-June 1997, pp. 5-12, French document with English Translation						
AX							
AY							
AZ							
Examiner <i>g-pj</i>				Date Considered 11/25/02			
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U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
AA		6,387,844	05-14-02	Fujishima et al.			
AB		6,228,480	05-08-01	Kimura et al.			
AC		5,764,415	06-09-98	Nelson et al.			
AD							
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FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO		
ATD	AO	WO 98/06675	02-19-98	WIPO			
ATD	AP	WO 96/13327	05-09-96	WIPO (with English Abstract)			
ATD	AQ	WO 96/29375	09-26-96	WIPO (with English Abstract)			X
	AR						
	AS						
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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
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Examiner <i>g-19</i>					Date Considered 11/25/02		

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LIST OF RELATED CASES

<u>Docket Number</u>	<u>Serial or Patent No.</u>	<u>Filing or Issue Date</u>	<u>Status or Patentee</u>
01247-0726-0V	6,045,896	04/04/00	BOIRE, et al.
01247-0728-0V PCT	6,068,914	05/30/00	BOIRE, et al.
01247-0739-0V PCT	6,103,363	08/15/00	BOIRE, et al.
01247-0854-0V CONT	6,322,881	11/27/01	BOIRE, et al.
01247-0855-0V PCT	09/486,719	08/02/00	PENDING
194165US0 CONT	6,326,079	12/04/01	PHILIPPE, et al.
213457US0 CONT	09/940,499	08/29/01	PENDING
216615US0 CONT	10/000,503	12/04/01	PENDING
218855US0 CONT	10/079,484	02/22/02	PENDING
218860US0 CONT	10/079,483	02/22/02	PENDING
219686US0 CONT	10/079,533	02/22/02	PENDING
220247US0 CONT	10/116,164	04/05/02	PENDING
211827US0 CONT*	09/923,353	08/08/01	PENDING

*Present application; listed for information.



Patent Application Serial No.: 09/923,353
Attorney Docket No.: 211827US0CONT
Application Filing Date: August 8, 2001
Group Art Unit: 1775

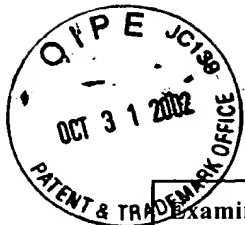
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LIST OF REFERENCES CITED BY APPLICANT

Examiner Initial	Tab	Document Title	Comments
ATP	A	Opposition filed by Glaverbel	
	B	Opposition filed by Pilkington PLC	
	C	Opposition filed by Toto LTD.	
	D	Opposition filed by Sternagel, Fleischer, Godemeyer	
	1	Pt-TiO ₂ Thin Films on Glass Substrates as Efficient Photocatalysts, Journal of Materials Science, 24 (1989), PP. 243-246.	Document D1 cited in the Opposition under Tab A
	2	EP A 581 216, Okada et al., February 2, 1994.	Document D2 cited in the Opposition under Tab A; Document D17 cited in the Opposition under Tab C
	3	Preparation of TiO ₂ Fine Particles Supported on Silica Gel as Photocatalyst, Yasumori et al., Journal of the Ceramic Society of Japan, 102 (1994).	Document D5 cited in the Opposition under Tab A
	4	Photocatalytic Properties of TiO ₂ , Wold, Chem. Mater., 1993, 5, pp. 280-283.	Document D6 cited in the Opposition under Tab A
	5	Kristallstruktur und Optische Eigenschaften von Dunnen Organogenen Titanoxyd-Schichten Auf Glasunterlagen [Crystal Structure and Optical Properties of Thin Organogenic Titanium Oxide Layers on Glass Substrates], Bach et al., Thin Solid Films I (1967/68), pp. 255-276, and English translation.	Document D7 cited in the Opposition under Tab A
	6	US 5,165,972, Porter, November 24, 1992.	Document D8 cited in the Opposition under Tab A
	7	US 4,485,146, Mizuhashi et al., November 27, 1984.	Document D9 cited in the Opposition under Tab A
	8	EP 816 466, Hayakawa et al., January 7, 1998.	Document D11 cited in the Opposition under Tab A; Document D4 cited in the Opposition under Tab C; Document D2 cited in the Opposition under Tab D
ATP	9	The Effect of Substrate Temperature on the Properties of Sputtered Titanium Oxide Films, Meng et al., Applied Surface Science 65/66 (1993) pp. 235-239.	Document D12 cited in the Opposition under Tab A



Examiner Initial	Tab	Document Title	Comments
ATP	10	Sol-Gel-Derived TiO ₂ Film Semiconductor Electrode for Photocleavage of Water, Yoko et al., J. Electrochem Soc., vol 138(8), Aug. 1991, pp. 2279-2284.	Document D13 cited in the Opposition under Tab A
	11	Dip-Coating of TiO ₂ Films Using a Sol Derived from Ti(O-iPr) ₄ -diethanolamine-H ₂ O-i-PrOH System, Takahashi et al., Journal of Materials Science 23 (1988), pp. 2259-2266.	Document D14 cited in the Opposition under Tab A
	12	A Structural Investigation of Titanium Dioxide Photocatalysts, Bickley, et al., Journal of Solid State Chemistry 92, 1991, pp. 178-190.	Document D15 cited in the Opposition under Tab A
	13	Highly Transparent and Photoactive TiO ₂ Thin Film Coated on Glass Substrate, Fukayama et al., Abstract 735, 187 th Electrochemical Society Meeting, March 29, 1995.	Document D4 cited in the Opposition under Tab A; Document D1 cited in the Opposition under Tab B; Document D5a cited in the Opposition under Tab C
	14	EP 684,075, Watanabe et al., June 15, 1995 and the front page of WO 95/15816, Watanabe et al., June 15, 1995, which is an equivalent of EP 684,075 and contains an English abstract.	Document D10 cited in the Opposition under Tab A; Document D2 cited in the Opposition under Tab B; Document D4 cited in the Opposition under Tab D
	15	EP 650 938 A1, Boire et al., May 3, 1995.	Document D3 cited in the Opposition under Tab B
	16	Oxide Layers Deposited from Organic Solutions, H. Schroeder in Physics of Thin Films: Advances in Research and Development, pp. 105-112, vol. 5, 1969 Academic Press.	Document D4 cited in the Opposition under Tab B; Document D5 cited in the Opposition under Tab D
	17	EP 737 513A1, Fujishima et al., October 16, 1996.	Document D3 cited in the Opposition under Tab A; Document D5 cited in the Opposition under Tab B; Document D16 cited in the Opposition under Tab C
	18	JP 267476/94, Fujishima et al., publication date not listed, and Derwent WPIIndex abstract; corresponds to EP 737 513A, (submitted herewith under Tab 17); WO 96/13327 (of record; published on May 9, 1996); and U.S. 6,387,844 (of record).	Document D5a cited in the Opposition under Tab B; Document D3 cited in the Opposition under Tab D
ATP	19	WO 97/07069, Heller, February 27, 1997.	Document D6 cited in the Opposition under Tab B; Document D1 cited in the Opposition under Tab D



Examiner Initial	Tab	Document Title	Comments
ATP	20	JP 63-100042, Kume et al., May 2, 1988.	Document D7 cited in the Opposition under Tab B; Document D8 cited in the Opposition under Tab C
	21	EP 0 071 865A2, Mizuhashi et al., February 16, 1983.	Document D8 cited in the Opposition under Tab B
	22	GB 2,031,756A, Gordon, April 30, 1980.	Document D9 cited in the Opposition under Tab B
	23	EP 0 348 185 B, Jenkins et al., December 27, 1989.	Document D10 cited in the Opposition under Tab B
	24	JPA 63-5301 Matsushita Electric Works (assignee), January 11, 1988, and Derwent WPIIndex abstract.	Document D2 cited in the Opposition under Tab C
	25	JPA 63-5304, Matsushita Electric Works (assignee), January 11, 1988, and Derwent WPIIndex abstract.	Document D7 cited in the Opposition under Tab C
	26	JP 91042/1986, Yokoishi, May 9, 1986.	Document D9 cited in the Opposition under Tab C
	27	JPA 7-222928, Chikuni et al., August 22, 1995, and Derwent WPIIndex abstract; equivalent of WO 95/15816 (submitted herewith)) and U.S. 5,853,866 (of record), 6,210,779 (submitted herewith), 6,294,246 (submitted herewith), and 6,294,247 (submitted herewith).	Document D11 cited in the Opposition under Tab C
	28	JPA 1-218635, Hitachi LTD (assignee), February 29, 1988, and Derwent WPIIndex abstract.	Document D12 cited in the Opposition under Tab C
	29	JPA 7-111104, Fujishima et al., April 25, 1995, and Derwent WPIIndex abstract.	Document D14 cited in the Opposition under Tab C
	30	Preparation of Transparent TiO ₂ Thin Film Photocatalyst and Its Photocatalytic Activity, Negishi et al., Chemistry Letters 1995, No. 9, pp. 841-842.	Document D3a cited in the Opposition under Tab D
	31	EP 633 064, Murasawa et al., January 11, 1995.	Document D3 cited in the Opposition under Tab C
	32	EP 590 477, Ogawa et al., April 6, 1994.	Document D10 cited in the Opposition under Tab C; Document D6 cited in the Opposition under Tab D
	33	EP 675 086, Okada et al., October 4, 1995.	Document D7 cited in the Opposition under Tab D
ATP	34	JP-A-5 253 544, Toto LTD (assignee), October 5, 1995, and Derwent WPIIndex abstract.	Document D1 cited in the Opposition under Tab C; Document D8 cited in the Opposition under Tab D



Examiner Initial	Tab	Document Title	Comments
ATP	35	JP-A-6-65012, Agency of Ind. Sci. & Technology (assignee), March 8, 1994, and Derwent WPIndex abstract.	Document D6 cited in the Opposition under Tab C; Document D9 cited in the Opposition under Tab D
	36	US 4,898,789, Finley, February 6, 1990.	Document D10 cited in the Opposition under Tab D
	37	EP 636 702, Shimizu et al., February 2, 1995.	Document D11 cited in the Opposition under Tab D
	38	US 5,348,805, Zagdoun et al., September 20, 1994.	Document D12 cited in the Opposition under Tab D
	39	Electrical and Electrochemical Properties of TiO ₂ films Grown by Organometallic Chemical Vapour Deposition, Takahashi et al., J. Chem. Soc., Faraday Trans 1, 1982, 78, pp. 2563-2571.	Document D13 cited in the Opposition under Tab D
	40	US 4,997,576, Heller et al., March 5, 1991.	Document D14 cited in the Opposition under Tab D
	41	US 5,342,676, Zagdoun, August 30, 1994.	Document D15 cited in the Opposition under Tab D
	42	EP 489 621, Zagdoun et al., June 6, 1992.	Document D13 cited in the Opposition under Tab C
	43	04/03/00 Letter from Mrs. Colette Ward, Patent Litigation Enquiries, British Library.	Document CW1 cited in the Opposition under Tab B
	44	Table showing values of roughness (Root Mean Square) of various coated glass samples available to the public at the priority date of EP 850 204.	Document TIM1 cited in the Opposition under Tab B
	45	WO 95/15816, Watanabe et al., June 15, 1995.	Equivalent to JPA 7-222928 submitted herewith under Tab 27
	46	US 6,210,779, Watanabe et al., April 3, 2001.	Equivalent to JPA 7-222928 submitted herewith under Tab 27
	47	US 6,294,246, Watanabe et al., September 25, 2001.	Equivalent to JPA 7-222928 submitted herewith under Tab 27
ATP	48	US 6,294,247, Watanabe et al., September 25, 2001.	Equivalent to JPA 7-222928 submitted herewith under Tab 27